

ON THE IMPORTANCE OF WORLD LANGUAGES IN CONNECTICUT SCHOOLS

Dear Mr. Friis,

As a resident of Connecticut and as a veteran educator with 24 years' experience, I am fully convinced that the education we offer is incomplete unless it includes at least two years of World Language study. There are many reasons for this, but as I imagine that other concerned citizens have been testifying about the necessity of cultural literacy and foreign language proficiency in the 21st century, I want to focus my comments on the great benefits to a student's mind that come with language study. In an article called 'Speaking in Foreign Tongues' in a publication called Kid's Sense, the researcher comments that mathematical skills, problem solving abilities, as well as improved reading and writing skills, increased with exposure to a foreign language. Other studies indicate that foreign language study often results in a rise in I.Q. Yet other studies show that foreign language study can level the economic playing field, as researchers found that students from lower socio-economic backgrounds (as measured by free/reduced lunch), who took foreign language, performed 'basically as well as their more fortunate peers'. I will attach a copy of an annotated bibliography of such studies to this testimony.

In addition, in a document available from the Education Resources Information Center, a definite positive correlation between years of language study and SAT scores is cited. The data supporting this assertion came from the Admission Testing Program of the College Board itself. I will also attach that document to this testimony. Other researchers conclude that foreign language learning improves the cognitive functioning of the brain, citing data showing that 'students who had taken a foreign language in high school had a significantly higher grade point average in all high school subjects as well as in freshman English courses in college'.

The 26 documents summarized and quoted in the addendum I provide to this testimony are in agreement: studying foreign language makes us smarter; it improves and strengthens our minds, and this strength can be applied to other forms of study and pursuits. In an era of fewer resources, less money and a growing number of students leading to greater competition, we can not afford NOT to include a two year minimum language program. It is a requirement that would yield more than the already urgent skills of cultural literacy and language proficiency, but the data show that it will make our kids better able to do whatever it is they devote their lives to.

Michaela Volovsek, teacher Hall High, West Hartford, CT





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Eight industries needing bilingual workers

- Story Highlights
- In almost every line of work, speaking a second language makes you valuable
- Twenty percent of Americans don't speak English at home
- California, New Mexico, have largest percentage of non-English speakers
- Spanish is most popular with 34 million speakers nationwide

By Anthony Balderrama
CareerBuilder.com writer

According to the U.S. Census Bureau's 2006 American Community Survey, approximately 80 percent – or 223.2 million people – of Americans use only English at home.

The remaining 20 percent – 55.8 million people – speak a language other than English. Add the millions of tourists visiting the country each year and you have a huge demand for workers who can communicate in more than one language.

Thankfully, bilingual workers come to the rescue. In almost every line of work the ability to speak a second language makes you a valuable asset.

Any job that requires you to interact with customers – either in person, on the phone or online – can use your knowledge of a second (or third) language. Think about it: Every additional customer you can speak with not only improves his or her experience but also brings in revenue to your employer.

The states with the largest percentage of citizens speaking a language other than English at home are California, New Mexico, Texas, New York and Arizona.

Spanish is by far the most popular non-English language spoken at home with roughly 34 million speakers nationwide. Still, there are millions of people speaking other languages – including French, German, Mandarin, Arabic and lesser known languages – that also benefit from bilingual workers.

If you speak more than one language or have thought about learning a second one, here are some industries and jobs where your skills will come in handy.

Industry: Health care

Why: Patients visiting emergency rooms and doctor's offices come from all walks of life. In fact, America's reputation as a leader in medicine attracts people from around the world, so you never know what language you'll hear when someone walks through the door.

Jobs: Registered nurse, paramedic, physician's assistant, home health aide

Industry: Hospitality

Why: Spas, resorts and hotels help visitors escape their daily routine and makes them feel like royalty. Creating a little bit of paradise – for a tourist or a local just trying to get away – is easier when you can understand what your client is saying to

you.

Jobs: Concierge, resort manager, hotel manager, desk clerk

Industry: Education

Why: One of the richer aspects of an American education is the exposure to different cultures. You can walk into most classrooms, from kindergarten through graduate levels, and find students who come from multilingual households or who are studying abroad.

Jobs: Teacher, ESL instructor, guidance counselor

Industry: Law enforcement

Why: Among the many duties of law enforcement personnel is interviewing people, either to solve crimes or to understand what's happening in a conflict. You can save a lot of time (and maybe even a life) if you don't have to wait for an interpreter.

Jobs: Police officer, investigator, security guard, probation officer, corrections officer

Industry: Customer service

Why: Every aspect of customer service involves dealing with people. Depending on where you work, you might have customers who are tourists or who come from households where English isn't spoken. Knowing more than one language means you can communicate to a larger amount of visitors, which both your employer and customers will appreciate.

Jobs: Sales clerk, demonstrator, retail store supervisor, computer support specialist, customer service representative

Industry: Social services

Why: Social service workers meet with families, adoption agencies and schools in order to ensure the well-being of children. The fewer language barriers between the worker, children and important people in their environment, the smoother things can run.

Jobs: Family social worker, substance abuse social worker, social work administration

Industry: Finance

Why: Money doesn't only stay on one continent, so in the world of finance, whether you're a teller or the CEO of an investment bank, you're dealing with euros and yen and the languages that come with them.

Jobs: Teller, financial adviser, investment banker, accountant

Industry: Communication

Why: Whether your job is talking to the media or writing for a publication, words are your livelihood. The more you know, the better you can do your job. Whether it enables you to speak to a reporter or interview a source for a story, being bilingual makes your job easier.

Jobs: Translator, public relations specialist, journalist, media relations officer

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ERIC Identifier: ED276305

Publication Date: 1986-10-00

Author: Weatherford, H. Jarold

Source: ERIC Clearinghouse on Languages and Linguistics Washington DC.

Personal Benefits of Foreign Language Study. ERIC Digest.

For a long time Americans tended to think that knowing English was sufficient for all their needs. As a result, Americans developed an image as the people who cannot say even the most rudimentary phrase in any other language. Fortunately, however, many business, political, and educational leaders are belatedly realizing that the whole world does not speak English, and that even many of those who have learned English as a second language prefer to converse, to do business, and to negotiate in their native tongue.

Not long ago learning a foreign language was considered to be merely a part of a liberal education or an intellectual exercise through the study of grammar and literature. It was automatically assumed that anyone studying foreign language as a major field was going to be either a teacher, an interpreter, or a translator and had no other career options. There is still a need for people in those professions. There is also a growing need for individuals who possess advanced skills in foreign languages and are trained in various technical areas. This is a result of increased activity in international business, the inflow of large amounts of foreign capital to the United States, increased internationalization, and an expanded awareness of the need to conduct not only business but also diplomatic relations in the language of the host country.

A second language is now becoming a vital part of the basic preparation for an increasing number of careers. Even in those cases where the knowledge of a second language does not help graduates obtain a first job, many report that their foreign language skills often enhance their mobility and improve their chances for promotion.

In addition to any technical skills that foreign language students choose to develop, they also have further tangible advantages in the job market. In a recent study that sought to ascertain which college courses had been most valuable for people who were employed in the business world, graduates pointed not only to career-oriented courses such as business

management, but also to people-oriented subjects like psychology, and to classes that had helped them to develop communication skills. Foreign language students, whose courses focus heavily on this aspect of learning, often possess outstanding communication skills, both written and oral. Furthermore, recent trends in the job marketplace indicate a revived recognition of the value of liberal arts training in general in an employee's career preparation.

WHAT ABOUT FOREIGN LANGUAGE AND TRAVEL ABROAD?

It is a very common and growing desire of Americans, perhaps especially among young people, to travel abroad. Only a generation or two ago people rarely ventured beyond their home states, but now, as the planet shrinks at an unprecedented pace, large numbers of people travel to other North and South American countries, to Europe, and even to Asia and Africa with increasing frequency for both work and pleasure.

Certainly it is possible to travel in foreign lands without knowing the language. In fact, as much as our generation travels, for many it would be impossible to learn the language spoken in every country that they might visit. Nevertheless, the traveler who knows the language of the country not only has an easier time solving everyday problems associated with travel, but also has a more pleasant experience and greater understanding both of the people of the foreign country and of their culture. Therefore, every language Americans master will enhance their enjoyment and reduce their frustration and isolation as they travel around the world.

HOW CAN FOREIGN LANGUAGE STUDY HELP IMPROVE CULTURAL UNDERSTANDING AND MUTUAL COMMUNICATIONS?

As the globe has shrunk, international business opportunities have multiplied and travel has grown apace. Mutual understanding and meaningful communication between nations, which have always been difficult to achieve, have now gained increased urgency. As a result, significant numbers of people in the United States have begun to call for better international understanding, and many of them have been urging more foreign language study as an important means to attaining this goal. Such exhortations are eminently well-founded, because the study of another language provides the most effective tool for penetrating the barrier of a single language and a single culture. Furthermore, experience with another culture enables people to achieve a significantly more profound understanding of their own.

Knowledge of a foreign language is not guaranteed to create empathy with and understanding for the native speakers of the language. However, the development of these qualities in individuals with a desire to understand and empathize is greatly facilitated by language study. Furthermore, foreign language study tends to help dissolve misconceptions and often helps to create feelings of sympathy for native

speakers of the language, especially if the study is begun early and pursued for a long period of time.

DOES FOREIGN LANGUAGE STUDY HELP TO DEVELOP MENTAL ABILITY OR IMPROVE GRADES?

There was a time in the United States when learning a foreign language was regarded primarily as a mental discipline for developing intellectual capacity. Even though it is now clear that language learning has numerous applications of both a practical and a humanistic nature, researchers as well as language educators still recognize that spin-off benefits accrue from foreign language study for other academic areas. For example, as Eugene Saviano stated, "The person who has never comprehended, spoken, read or written a language other than his mother tongue has little or no perspective on his own language,...he has never penetrated the rich areas of learning and experience lying beyond monolingual communication."

Novelist John Updike attributes the deterioration of writing skills in America to two generations growing up without Latin: "In some curious way, the study of this dead and intricate language enabled writers to write a beautiful, clear idiomatic English." It may be that these benefits are not to be gained only from Latin. As Vermont Royster said, "What is involved is a process in which the study of a different language gives a person an understanding of the nature of language itself, a sense of structure that is difficult to acquire from studying one's own familiar language. Any new language forces us to think why...we need to do what we do to express ourselves clearly."

For many decades researchers have attempted to reinforce with empirical evidence the intuitive sense of the value of foreign language study in improving the cognitive functioning of the brain, and many research projects have lent credence to these ideas, particularly that foreign language study enhances a student's achievements in English. For example, one researcher found that students who had taken a foreign language in high school had a significantly higher grade point average in all high school subjects as well as in freshman English courses in college. In addition, data from the Admission Testing Program of the College Board show a definite positive correlation between Scholastic Aptitude Test (SAT) scores and the study of foreign languages. In one recent test group, for example, students who had taken no foreign language in high school achieved a mean score of 366 on the verbal portion of the SAT, and 409 on the math portion. Students who had taken only one year of a foreign language had slightly higher scores (378 and 416), whereas students with two years of foreign language showed more dramatic increases (417 and 463). Each additional year of language study brought a further rise in scores, with students who had studied a language for five years or more achieving an average of 504 on the verbal and 535 on the math portion of the exam.

The College Board also calculated correlations between length of study of certain subjects, including English, math, biological sciences, physical sciences, and social studies, and SAT scores, and found that in almost all cases the longer a student studied one of these subjects, the higher were the scores. However, the verbal scores of students who had taken four or five years of a foreign language were higher than verbal scores of students who had studied any other subject for an equal length of time. Similar results have been obtained by other researchers who have examined foreign language study and SAT scores.

A number of studies in bilingual education also seem to lead to the conclusion that foreign language study can aid and even accelerate the cognitive development of the brain. Bilingual subjects in various tests have outperformed similar monolingual subjects on verbal and nonverbal tests of intelligence. This discovery has led some researchers to speculate that bilinguals may have a language ability that enables them to achieve greater mental flexibility. Along with the certainty that people who know more than one language and culture can communicate more effectively with people of other countries and cultures, it is indeed possible that through learning another language and culture, people become more effective problem-solvers, closer to achieving solutions to pressing social problems because of an increased awareness of a wider set of options.

FOR MORE INFORMATION

Cooper, C., Ed. RESEARCH WITHIN REACH. RESEARCH-GUIDED RESPONSES TO THE CONCERNS OF FOREIGN LANGUAGE TEACHERS. Athens, GA: Agee Publishers, 1985.

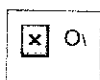
Eddy, P.A. THE EFFECTS OF FOREIGN LANGUAGE STUDY IN HIGH SCHOOL ON VERBAL ABILITY AS MEASURED BY THE SCHOLASTIC APTITUDE TEST--VERBAL. Washington, DC: Center for Applied Linguistics, 1981. ED 196 312.

Fradd. "Bilingualism, Cognitive Growth, and Divergent Thinking Skills." EDUCATIONAL FORUM 46 (1982):469-474.

Honig, J., and R. I. Brod. FOREIGN LANGUAGES AND CAREERS. New York: Modern Language Association, 1973.

Sims, N. THE IMPORTANCE OF FOREIGN LANGUAGES FOR TODAY'S STUDENTS. Unpublished manuscript, 1977. ED 152 089.

Timpe, E. F. "The Effect of Foreign Language Study on ACT Scores." ADFL BULLETIN 11 (1979):10-11.



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The Effect of Second Language Learning on Test Scores, Intelligence and Achievement

An Annotated Bibliography

Prepared By Elizabeth L. Webb

Program Specialist for Foreign Languages and International Education

Georgia Department of Education

Cooper, T. C. (1987). Foreign Language Study and SAT-Verbal Scores. The Modern Language Journal, 71/4, 381-387.

Data from the College Board's Admission Testing Program revealed that SAT-verbal scores of students who had taken four or five years of any other subject. A large-scale study conducted by Eddy in 1981 concluded that students who study foreign languages for longer periods of time did better on various SAT sub-tests and on the test as a whole than students who studied less foreign language, even when the variable of verbal giftedness was controlled. Cooper's own study of 23 metropolitan high schools in the southeast revealed that students who take a foreign language in high school scored significantly higher on the verbal portion of the SAT than those who do not. Economic background, which was measured by the number of students receiving free and reduced lunches, did not affect students' performance. Even those who came from lower socio-economic backgrounds, but took foreign language, performed "basically just as well as their more fortunate peers."

Saunders, C. M. (1998). The Effect of the Study of a Foreign Language in the Elementary School on Scores on the Iowa Test Of Basic Skills and an Analysis of Student-participant Attitudes and Abilities. Unpublished dissertation, University of Georgia.

Saunders specifically examined the performance of third grade students enrolled in the Georgia Elementary School Foreign Language Model Program. She compared students who had not received any foreign language instruction with students one year younger who had received four years of instruction, five days each week, for thirty minutes per day. She found those students in the ESFL program scored significantly higher on the Math portion of the ITBS than the older students had scored. They also performed better on the Reading portion, but the difference was not statistically significant.

Armstrong, P. W. and J. D. Rogers. (1997). Basic Skills Revisited: The Effects of Foreign Language Instruction on Reading, Math and Language Arts. Learning Languages, Spring, 20-31.

This carefully constructed study demonstrated that third graders who were taught Spanish for thirty minutes, three times per week showed statistically significant gains in their

Metropolitan Achievement Test scores in the areas of math and language after only one semester of study. This study verifies two earlier studies that showed that foreign language instruction either had no detrimental effect on basic skills or a positive effect on students' achievement in basic skill areas.

The results of this study are particularly interesting since one class of students in the experimental group had actually received one-and-one-half fewer hours of math instruction per week, yet still outperformed the students in the control classes in math.

Garfinkel, A. and K. E. Tabor. (1991). Elementary School Foreign Languages and English Reading Achievement: A New View of the Relationship. Foreign Language Annals, 24/5, 375-382.

The authors examined English reading scores of students of varying levels of intelligence who had had one to two years of Spanish instruction in grades five and six. They found an especially significant relationship between high scores in reading and extended foreign language study in the cases of children of average intelligence. The data gathered indicate those students of average intelligence, rather than above-average intelligence, may benefit the most from early instruction in a second language.

Samuels, D. D. and R. J. Griffore (1979). The Plattsburgh French Language Immersion Program: Its Influence on Intelligence and Self-esteem. Language Learning, 29/1, 45-52.

Comparison of a group of students who participated in a French Immersion program for one year to a group of students who were enrolled in a regular classroom revealed that the first graders who learned French showed significant gains in measures of performance I.Q. The students in the immersion program performed better on test items that asked them to interpret and organize a series of seemingly unrelated objects. Study of an unfamiliar language appears to sharpen this skill.

Robinson, D. W. (1992). The Cognitive, Academic and Attitudinal Benefits of Early Language Learning. In Met, M., ed. Critical Issues in Early Language Learning. White Plains, NY: Longman.

Starting in the 1960's and continuing into the 1990's, some 12 dozen studies were conducted on the relationship between learning a second language early in life and cognitive ability. Robinson summarized many of them in this article, concluding, "the picture that emerges is . . . a youngster whose experience with two language systems seems to have left him or her with a mental flexibility, a superiority in concept formation,

and a more diversified set of mental abilities.” The studies also demonstrated that children who have studied a foreign language perform better on standardized tests and tests of basic skills in English, math and social studies. Data from the College Board’s 1992 edition of College Bound Senior revealed that students who had had four or more years or foreign language scored higher on the verbal section of the SAT than those who had had four or more years in any other subject area. This information corroborated Cooper’s conclusion in 1987.

Curtain, H. (1990). Foreign Language Learning: An Early Start. ERIC Clearinghouse on Languages and Linguistics, Center for Applied Linguistics, (Document No. EDO-FL-90-12).

Curtain summarizes the primary advantages of beginning foreign language study at the elementary school level:

- Longer sequences of instruction lead to higher levels of language proficiency
- Beginning FL study before age ten helps in the development of global understanding
- Cognitive development and basic skills are enhanced by foreign language learning
- Communication skills, including memory and listening skills, are sharpened by foreign language study
- Many personal benefits accrue, such as enhanced career potential

Genesee, F. and N. Cloud. (1998). Multilingualism is Basic. Educational Leadership, March, 62-65.

Genesee and Cloud argue that basic education in the new millennium must include second and third languages if the United States is to cope with the unprecedented growth in diversity within its borders and also continue to compete successfully in the global marketplace. Research indicates that foreign language study provides both cognitive and sociocultural benefits. Cloud and Genesee conclude, “Linguistic and cultural competence will be the mark of the well-educated citizen of the 21st century.”

Georgia PTA Board of Managers. (1994). RESOLUTION: Foreign Language Programs.

This resolution advocates foreign language programs in the elementary and middle schools, encourages long sequences of foreign language study beginning as early as possible, and endorses an articulated program of foreign language study from early childhood through the high school, college and university levels. The resolution cites

children's native ability to learn language, gains in flexibility, creativity, divergent thinking skills and higher order thinking skills, as well as gains on standardized test scores as some of the grounds supporting this resolution.

Willis, S. (1998). Foreign Languages: Learning to Communicate in the Real World. Association for Supervision and Curriculum Development, Winter, 1-8.

Willis found that recent developments in foreign language teaching methodology helped students develop the ability to use the language in practical situations. New national standards developed by the American Council of Teachers of Foreign Language emphasized communication skills rather than grammar rules. But learning a second language takes a long time regardless of methodology. To put U.S. students on par with students in other countries, foreign language must become part of the core curriculum from K –12th grade.

Dumas, L. S. (1999). Learning a Second Language: Exposing Your Child to a New World of Words Boosts Her Brainpower, Vocabulary, and Self-Esteem. Child, February, 72, 74, 76-77.

Recent brain research indicates that learning a second language is a powerful experience that helps the brain of young children develop. The young brain will actually grow the connections needed to learn the language. That is no longer possible after age 12. Seven states have instituted a second-language requirement for all children in elementary school: Arizona, Arkansas, Louisiana, North Carolina, Montana, New Jersey and Oklahoma.

A study of 13,200 third and fifth graders in Louisiana public schools revealed that regardless of race, gender or academic level, kids taking foreign language classes did better in the English section of the Louisiana Basic Skills Test than those who did not.

Research Notes: Language Learning and the Developing Brain. (1996) Learning Languages, 1/2, 17. Reprinted by the Center for Applied Linguistics on: <www.cal.org>.

Recent studies suggest that the brain of a child has more synapses and greater plasticity and is therefore much better suited to learning foreign language than the brain of an older child or adult.

Nash, J. M. (1997). Special Report: Fertile Minds. Time, 149/5. Reprinted on: <www.time.com>.

Nash summarizes much of current research on the development of the human brain. She states that there are a series of “windows for developing language. The window for acquiring syntax may close as early as five or six years of age . . . The ability to learn a second language is highest between birth and the age of six, then undergoes a steady and inexorable decline.” She concludes, “it is clear that foreign language should be taught in the elementary school, if not before” (8).

Marcos, K. M. (1998). Learning a Second Language: What Parents Need to Know. National PTA Magazine, August/September, 32-33.

Marcos summarized research on early language learning and concluded that learning a second language in the elementary school usually enhanced a child’s ability in English. In addition, early foreign language study offered students various benefits in terms of their ability to communicate, their cognitive development, cultural awareness and future job opportunities.

Holman, J. R. (1994). Learning A Language. Better Homes and Gardens, January, 41 & 43.

Holman stressed the advantages of learning foreign languages as early as possible. She cited the benefits in other areas of study, as well as recent neurobiological research that strongly suggested that the best time to learn a second or third language is before age 10. Holman also emphasized that adequate time must be devoted to language study in order to achieve the desired results; She quoted Dr. Lightbrown of Concordia University as saying, “Twenty minutes three times a week is not a very effective way to acquire a language, no matter when you start.”

Hart, A. and J. Harris. (1992). An Assistant Superintendent and Curriculum Specialist View the Models. In Met, M., ed. Critical Issues in Early Language Learning. White Plains, NY: Longman.

The Chapel Hill-Carrboro (NC) City Schools decided to provide all students in the district with foreign language instruction. In this article, Hart and Harris contend that the Foreign Language in the Elementary School or FLES model of daily language learning that they have chosen helps to “level the playing field with ESL and other at-risk students.” They also state that the FLES program greatly benefited all students by

reinforcing concepts that have already been taught in the regular classroom. FLES is considered a part of the core curriculum and a component of basic childhood education.

Foreign Languages: The Road to Success in a Global World, Information for School counselors. Public Schools of North Carolina; State Board of Education; Jay Robinson, Chairman; Department of Public Instruction; Michael Ward, Superintendent.

This brochure is intended to be a practical guide for school counselors and asserts that foreign language study is appropriate for all students, whether they plan to attend college or not. It cites many academic reasons for studying a foreign language, including higher ACT and SAT scores, stronger English vocabulary skills, a better understanding of English, improved literacy, greater cognitive skills and enhances listening and memory.

Torres, I. Report on Current Practice. In Met, M., ed. Critical Issues in Early Language Learning. White Plains, NY: Longman.

Ferndale Public Schools established its Elementary school foreign language program in 1981, with the philosophy that each child in the district should have the opportunity to learn a second language, regardless of physical, emotional or learning disabilities. In grade K-3, most children with disabilities had been able to attain an adequate level of proficiency in the foreign language. In the upper elementary grades, students with disabilities often did not do well on written tests, but were able to be successful on informal, oral tests.

Winslow, R. (1997). How Language is Stored in Brain Depends on Age. The Wall Street Journal, July. (Summary of Distinct Cortical Areas Associated with Native and Second Languages, Nature, 388, 1997)

A study of 12 healthy bilingual volunteers at Memorial Sloan-Kettering Cancer Center in New York revealed that the capacity to speak a second language is stored in different areas of the brain depending on when in life a person becomes bilingual. Children who learn a second language store that capacity, together with their native language, in one sector of the brain. Adults language learners store each new language learned in a separate area. This finding helped explain why children who learn two languages develop the ability to speak both with native proficiency and supported the argument that foreign language instruction should be part of the elementary and middle school curriculum.

Met, M. (1991). Foreign Language: On Starting Early. Educational Leadership, September.

Met summarized both the advantages and the shortcomings of three different approaches to early language learning: immersion, FLES and FLEX. In immersion, the content is taught through the foreign language. Since the classroom teacher is also the language teacher, this is a cost-effective model that achieves excellent results, but teachers with the language skills and certification to teach such classes are rare. FLES programs are sequential programs beginning at any grade K-6 that meet for a minimum of 90 minutes two to five times per week. If a FLES program is part of a well-articulated, long sequence of study, students will typically gain useable levels of proficiency in the language and also improve their knowledge of and attitude toward other cultures. FLEX programs are short-term classes that focus primarily on culture. These programs can provide students with strong motivation to continue their language study later, but do not result in any meaningful level of language development.

Speaking in Foreign Tongues. (1998). Kid's Sense, 42. Arkansas Children's Hospital.

This short article emphasizes the importance of early language learning. Mathematical skills, problem solving skills and the ability to synthesize information increase with exposure to foreign language. Other advantages include improved reading and writing skills, a stronger vocabulary and better job opportunities later in life.

Curtain, H. and C. A. B. Pesola. Languages and Children: Making the Match: Foreign Language Instruction for An Early Start Grades K-8. Longman (New York) 1994.

Curtain and Pesola's text is regarded by many as the authoritative work on early language learning. In their introduction, they provide a broad overview of the benefits of early language learning. Immediate benefits include greater academic achievement in other areas of study, including reading, social studies, and mathematics and earning higher SAT and ACT scores, especially in verbal areas. Long-range benefits include enhanced career opportunities, developing more flexibility in thinking processes and exchanging professional ideas and information in commerce, science, law and the arts. They also summarize studies concerned with the relationship of language learning to English language and mathematics. "The evidence was consistent: There was no sacrifice of basic skills when time was given to learning a new language" (7). In fact, some studies indicated that language instruction resulted in dramatic gains in test performance in basic skill areas.

Research that has been conducted specifically on The Georgia Elementary School Foreign Language Model Program:

Adger, C. (1995). Georgia Elementary School Foreign Language Model Program: An Evaluation. Center for Applied Linguistics, Washington, DC.

In the program evaluation conducted in 1995, the Center for Applied Linguistics (CAL) conducted site visits to ESFL Model program schools, observed classes, interviewed school and system administrators, students, parents, teachers and Georgia Department of Education personnel and also surveyed teachers and administrators regarding the program. Adger noted that the Georgia ESFL Model Program was regarded as a state-of-the-art model within the field of foreign language. She concluded that the ESFL program was “excellent by any measure. Moreover, the fact that continuous renewal of the curriculum and professional development are inherent in the program promises that it will continue its high quality (3)”.

Boyson, B. (1997). Listening and Speaking Assessment of Third Grade Students in the Georgia Elementary School Foreign Languages Model Program. Center for Applied Linguistics, Washington, DC.

The 1997 evaluation of the ESFL Model Program focused on student’s ability to speak and understand the language being taught. The Student Oral Proficiency Assessment, a listening and speaking instrument, was administered to third grade students by a team of CAL staff and Georgia teachers. Interviews were conducted at eight sites representing all four languages taught: Spanish, French, German and Japanese. Most students scored at the Junior Novice Mid or Junior Novice-High level, indicating that they were reaching desired levels of language proficiency and making progress toward the goal of becoming fluent users of the language. Boyson concluded, “the evidence that is available here seems to indicate that the students in the Georgia ESFL Model Program are making impressive progress toward mastering foreign languages” (3).

Boyson, B. and L. Thompson. (1998) Student Oral Proficiency Assessment of Fifth Grade Students in the Georgia Elementary School Foreign Languages Model Program. Center for Applied Linguistics, Washington, D. C.

The third program evaluation compared the performance of fifth grade students enrolled in the ESFL Model Program to that of third graders in the program. It also compared the performance of fifth grade students in Model program schools with the performance of students in non-model Foreign Language in the Elementary School (FLES) programs.

A new version of the Student Oral Proficiency Assessment was developed for the fifth grade level to conduct this program evaluation. The results demonstrated that fifth grade

students scored one level higher in both listening proficiency and oral fluency than the third grade students and were reaching “commendable levels of proficiency” (1). The comparison of the ESFL Model program with the non-model FLES programs revealed that all students were making progress, but that a substantial percentage of the students in the Model Program were exceeding expectations in their ability to comprehend and speak the languages they were learning.

Saunders, C. M. (1998). The Effect of the Study of a Foreign Language in the Elementary School on Scores on the Iowa Test of Basic Skills and an Analysis of Student-participant Attitudes and Abilities. Unpublished dissertation, University of Georgia.

(Also cited above)

Saunders specifically examined the performance of third grade students enrolled in the Georgia Elementary School Foreign Language Model Program. She compared students who had not received any foreign language instruction with students one year younger who had received four years of instruction, five days each week, for thirty minutes per day. Students in the ESFL program scored significantly higher on the Math portion of the ITBS than the older students had scored. They also performed better on the Reading portion, but the difference was not large enough to be considered statistically significant.

The Benefits of Second Language Study

Research Findings with Citations

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Status of second language study in the USA

- "A pervasive lack of knowledge about foreign cultures and foreign languages threatens the security of the United States as well as its ability to compete in the global marketplace and produce an informed citizenry. The U.S. education system has, in recent years, placed little value on speaking languages other than English or on understanding cultures other than one's own. Although there have been times in the country's history when foreign languages were considered as important as mathematics and science, they have reemerged as a significant concern primarily after major events that presented immediate and direct threats to the country's future. Most recently, the events of September 11, 2001, compelled the federal government to reflect on the expertise of its personnel and to focus attention on the need for more and better language skills, particularly in certain languages considered critical. It would be shortsighted, however, to limit national attention to the needs of government alone. Language skills and cultural expertise are also urgently needed to address economic challenges and the strength of American businesses in an increasingly global marketplace. Professions such as law, health care, social work, and education call out for an international dimension that reflects the changed world environment and increasingly diverse U.S. population. The U.S. education system—from elementary and secondary school to higher education—needs the capacity to provide the requisite training. Higher education needs the

capacity to serve as a resource on the politics, economics, religions, and cultures of countries across the globe, countries whose positions on the world stage change over time, often in unpredictable ways." (National Research Council 2007)

- "All but two countries (Ireland and Scotland) in the European Union mandate the study of a foreign language, which usually begins in primary school. With the exception of Italy and Wales, all European students must learn a foreign language throughout their compulsory education." (Eurydice 2005)
- "Interest in and support for language study has been strengthened in the United States in recent years by the growing recognition that proficiency in more than one language benefits both individual learners and society. For the individual language learner, research has found a positive link between second language proficiency and cognitive and academic ability. (And)...a multilingual workforce enhances America's economic competitiveness abroad, helps maintain our political and security interests, and promotes tolerance and intercultural awareness." (Marcos & Peyton 2000)
- In addition to developing a lifelong ability to communicate with people from other countries and backgrounds, other benefits include improved overall school performance and superior problem-solving skills. (Bamford & Mizokawa 1991; Hakuta 1986)

Second language study benefits academic progress in other subjects

- Applying current standard practices of foreign language instruction ("Five Cs of Communication, Culture, Connections with other disciplines, Comparisons with students' native languages and cultures, and use of the foreign language in Communities outside the classroom") reinforces English language course content of other coursework. (Curtain & Dahlberg 2004)
- Learning another language can enhance knowledge of English structure and vocabulary (Curtain & Dahlberg, 2004).
- A study of 13,200 third and fifth graders in Louisiana public schools revealed that, regardless of race, gender, or academic level, children taking foreign language classes did better on the English section of the Louisiana Basic Skills Test than those who did not. (Dumas 1999)
- Strong evidence shows that time spent on foreign language study strongly reinforces the core subject areas of reading, English language literacy, social studies and math. Foreign language learners consistently outperform control groups in core subject areas on standardized tests, often significantly. (Armstrong & Rogers 1997; Saunders 1998; Masciantonio 1977; Rafferty 1986; Andrade 1989; Kretschmer & Kretschmer 1989)
- One study found students scored significantly higher in math and language arts after one semester of foreign language study 90 minutes per week. (Armstrong 1997)
- Foreign language learners consistently outperform control groups in core subject areas on standardized tests often significantly. (Armstrong & Rogers 1997, Saunders 1998, Masciantonio 1977, Rafferty 1986, Andrade, Kretschmer & Kretschmer 1989)
- Students who started kindergarten in the first Kansas City foreign language magnet schools in 1988 had surpassed national averages in all subjects by the time they reached fifth grade. These foreign language students performed especially well in mathematics. (Eaton 1994)
- Foreign language students within an urban magnet program scored well above anticipated national norms in both reading and mathematics and higher than the average of all magnet

school participants, despite the fact that they represent a broad cross-section of the local community. (Andrade 1989)

- Mastering the vocabulary of a second language enhances student comprehension and abilities in reading, writing, mathematics and other subjects. (Saville-Troike 1984)
- Bilingualism fosters the development of verbal and spatial abilities. (Diaz 1983)
- Students learning a second language in elementary school surpassed those who were not in English reading and language arts tests. (Mavrogenes 1979).
- Early second language study promotes achievement in English vocabulary and reading skills. (Masciantonio 1977)
- Foreign language learners consistently score higher than their non-language-learning peers in measures of English vocabulary, particularly when the language studied has Latin roots. (Masciantonio 1977)

Second language study narrows achievement gaps

- Children of color, children from economically disadvantaged backgrounds, and English Language Learners make the greatest proportionate achievement gains from foreign language study. Early foreign language study is less dependent on previous verbal learning than most other elements of the elementary school curriculum and this allows some students to succeed who have otherwise experienced repeated failure in school. (Curtain & Dahlberg 2004)
- A study of 13,200 third and fifth graders in Louisiana public schools revealed that, regardless of race, gender or academic level, children taking foreign language classes did better on the English section of the Louisiana Basic Skills Test than those who did not. (Dumas 1999)
- Foreign language study can help to alter the trajectory for children of average intelligence and narrow the achievement gap. (Garfinkel & Tabor 1991)
- Cincinnati's Foreign Language Magnet Program has a student population that is 57% African American and 43% Caucasian, with 52% of the total receiving free and reduced lunch. Achievement for these children far exceeds national norms in both reading and math and participants in the foreign language magnet program on average score higher than the average of all Cincinnati's many magnet programs. (Andrade, Kretschmer & Kretschmer 1989)
- In a four year study by McGill University, working class students did just as well in foreign language as middle-class students even though their English skills were not as good. (Holobow 1988)

Second language study benefits basic skills development

- A study of 13,200 third and fifth graders in Louisiana public schools revealed that, regardless of race, gender or academic level, children taking foreign language classes did better on the English section of the Louisiana Basic Skills Test than those who did not. (Dumas 1999)
- There's a high positive correlation between foreign language study and improved reading scores for children of average and below average intelligence. (Garfinkel & Tabor 1991)
- Foreign language learners have better listening skills and sharper memories than their monolingual peers. (Lapkin, et al 1990, Ratte 1968)

Second language study benefits higher order, abstract and creative thinking

- Several studies indicate that individuals who learn a second language are more creative and better at solving complex problems than those who do not. (Bamford & Mizokawa, 1991)
- Language learners show greater cognitive flexibility, better problem solving and higher order thinking skills. (Hakuta 1986)
- Research suggests that foreign language study “enhances children’s understanding of how language itself works and their ability to manipulate language in the service of thinking and problem solving.” (Cummins 1981)
- Early language study results in greater skills in divergent thinking and figural creativity. (Landry 1973)

Early second language learning enriches and enhances cognitive development

- “The power to learn a language is so great in the young child that it doesn’t seem to matter how many languages you seem to throw their way....They can learn as many spoken languages as you can allow them to hear systematically and regularly at the same time. Children just have this capacity. Their brain is ripe to do this...there doesn’t seem to be any detriment to....develop[ing] several languages at the same time” according to Dr. Susan Curtiss, UCLA Linguistics professor. (Curtain & Dahlberg 2004)
- “The learning experiences of a child determine which [neural] connections are developed and which no longer function. That means what is easy and natural for a child – learning a language – can become hard work for an older learner.” (Curtain & Dahlberg 2004)
- Research indicates that children who are exposed to a foreign language at a young age achieve higher levels of cognitive development at an earlier age. (Bialystok & Hakuta 1994; Fuchs 1989)
- Language learners show greater cognitive flexibility, better problem solving and higher order thinking skills. (Hakuta 1986)
- People who are competent in more than one language consistently outscore monolinguals on tests of verbal and nonverbal intelligence. (Bruck, Lambert, Tucker 1974, Hakuta 1986, Weatherford 1986)
- Foreign language learners have better listening skills and sharper memories than their monolingual peers. (Lapkin, et al 1990, Ratte 1968)

Second language study enhances a student's sense of achievement

- Foreign language study is area where children not accustomed to achievement in school are able to excel. The resulting benefit to self-image, self-esteem and satisfaction with school experience are enormous. Evidence from several studies show language students to have a significantly higher self-concept than do non-language students. (Masciantonio 1977, Saunders 1998, Andrade, et al. 1989)
- Language study is an area in which ELL students can be successful in front of their peers, since bilingual children learn additional languages more quickly and efficiently than monolingual children. (Cummins 1990)
- Offering foreign language study demonstrates to ELL students and their families that languages other than English - and by extension cultures other than the mainstream - are valued. Research suggests that foreign language study “enhances children’s understanding of how language itself works. It also increases their ability to manipulate language in the service of thinking and problem solving.” (Cummins 1981)

Second language students score higher on standardized tests

- Students of foreign languages tend to score higher on standardized tests. Results from the Scholastic Aptitude Test (SAT) show that students who had studied a foreign language for 4 or more years outscored other students on the verbal and math portions of the test. (College Board 2003)
- Students who completed at least four years of foreign-language study scored more than 100 points higher on each section of the SAT than students who took a half year or less. (College Board 2004)
- Students who studied four or five years of a foreign language scored higher on the verbal section of the 2004 SAT than students who had studied any other subject for the same number of years. (Cooper 1987; Eddy 1981)
- Other studies correlate bilingual proficiency with higher scores on standardized tests and tests of both verbal and nonverbal intelligence (Caldas & Boudreaux, 1999; Hakuta, 1986; Thomas, Collier, & Abbott, 1993).
- Foreign language learners consistently outperform control groups in core subject areas on standardized tests often significantly. (Armstrong & Rogers 1997, Saunders 1998, Masciantonio 1977, Rafferty 1986, Andrade, Kretschmer & Kretschmer 1989)
- People who are competent in more than one language consistently outscore monolinguals on tests of verbal and nonverbal intelligence. (Bruck, Lambert, Tucker 1974, Hakuta 1986, Weatherford 1986)
- Third-graders who had received 15 minutes of conversational French lessons daily for a year had statistically higher Stanford Achievement Test scores than their peers who had not received French instruction. (Lopata 1963)

Second language study promotes cultural awareness and competency

- In an age of global interdependence and an increasingly multicultural and multiethnic society, early foreign language study gives children unique insight into other cultures and builds their cultural competency skills in a way that no other discipline is able to do. "The age of ten is a crucial time in the development of attitudes toward nations and groups perceived as 'other' according to the research of Piaget, Lambert and others. At age 10, children are in the process of moving from egocentricity to reciprocity and information received before age 10 is eagerly received." (Curtain & Dahlberg 2004)
- "...(E)xposure to a foreign language serves as a means of helping children to intercultural competence. The awareness of a global community can be enhanced when children have the opportunity to experience involvement with another culture through a foreign language." (Curtain & Dahlberg 2004)
- "The positive impact of cultural information is significantly enhanced when that information is experienced through foreign language and accompanied by experiences in culturally authentic situations." (Curtain & Dahlberg 2004)
- Experiences in learning a second language and learning another culture will facilitate teachers' interactions with their students' learning experience. Competent teachers understand that positive self-concept and positive identification with one's culture is the basis for academic success. (Lemberger 1990)
- Foreign language learners are more tolerant of the differences among people. (Carpenter & Torney 1974)

Second language study found to improve chances of college acceptance, achievement and attainment

- Students who were in “rigorous” programs in high school—that included three years of foreign language study—were likely to earn better grades in college and less likely to drop out. (Horn & Kojaku 2001)
- Graduating high school seniors with two or more years of foreign language study showed significant superiority in performance on achievement tests in English when compared with nonforeign language students. (Bastian 1980)

Second language study enhances career opportunities

- Studying a foreign language helps students understand English grammar better and improves their overall communication and problem-solving skills. Beyond the intellectual benefits, knowledge of a foreign language facilitates travel, enhances career opportunities, and enables one to learn more about different peoples and cultures. (National Research Council 2007)
- In a survey of 581 alumni of The American Graduate School of International Management in Glendale, Arizona, most respondents said they had gained a competitive advantage from their knowledge of foreign languages and other cultures. They said that not only was language study often a critical factor in hiring decisions and in enhancing their career paths, it also provided personal fulfillment, mental discipline, and cultural enlightenment. (Grosse 2004)
- In recent years, the U.S. government has expressed a need for fluent speakers of languages other than English, particularly in less commonly taught languages such as Arabic and Chinese (U.S. General Accounting Office 2002).
- Students of foreign languages may have better career opportunities. (Carreira & Armengol 2001)

Second language study benefits understanding and security in community and society

- Research suggests that attitudes about other groups and peoples are formed by the age of ten and are often shaped between the ages of four and eight. Learning a language at a young age helps connect a child with another culture while they are still open-minded and have not yet begun to restrict their views of others whom they perceive to be different. (Curtain & Pesola 1988)
- The benefits of foreign language study last throughout one’s lifetime. Recent research indicates that knowing two languages may help stave off age-related mental decline. Researchers compared monolingual to bilingual adults in a test of cognitive function, and bilingualism seemed to offer a protective benefit. (Bialystok 2004)
- The benefits to society are many. Americans fluent in other languages improve global communication, enhance our economic competitiveness abroad, and maintain our political and security interests. (Center for Applied Linguistics 2004)

Barriers to second language study

- “...Not only are American secondary school students studying foreign languages too seldom, and with too little intensity, they are failing to study in sufficient numbers many of the languages essential to meeting the challenges of a new era. (Committee for Economic Development 2006)
- “...Although approximately one million students in the United States study French, a language spoken by 70 million people worldwide, fewer than 40,000 American students

- Opportunities to learn about other languages and cultures are severely lacking in many low-income, minority, and urban school districts. Foreign language instruction is offered in only one-quarter of urban public schools compared with about two-thirds of suburban private schools.
- At the middle-school level, 78 percent of private (non-parochial) schools report that more than half of their students study foreign languages, compared with 51 percent of students in public middle schools.
- In 2003, 29 percent of public school principals in heavily minority school districts anticipated future decreases in instructional time for foreign languages. African-American, Hispanic, and American Indian students earn fewer credits in foreign languages than their white peers. Increasing access to and enrollments in foreign language courses in elementary and secondary schools may not, by themselves, be sufficient to improve foreign language proficiency. The average high school student receives about 150 hours of language instruction per year.
- (Greater language proficiency can be achieved with a longer amount of time on task. (Curtain & Pesola 1988)) Experience has shown that 300 hours of instruction spread over two years is woefully inadequate for high-school students to develop any usable level of proficiency. Elementary-school students, who receive only 30-60 minutes of instruction per week, are even more disadvantaged. Schools may also need to change the way languages are taught. Time on task is important, which may mean greater use of immersion programs and content-based language learning, where subject matter drawn from the school curriculum is delivered in a foreign language. In 2002, only 29 states offered language-immersion programs..."
—*The Importance of International Studies and Foreign Language Education for U.S. Economic and National Security* (Committee for Economic Development 2006)

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